

INTERROGATIVE SUGGESTIBILITY IN AN
IMPRISONED SEXUAL OFFENDER POPULATION

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ABSTRACT

This study explores interrogative suggestibility in different imprisoned criminal populations. Specifically, it investigates the relationship between type of offence and interrogative suggestibility, looking at three different offender groups; 1) Sexual offence with a victim under the age of 16, 2) Sexual offence with a victim over the age of 16 and 3) Non-violent/Non-sexual offence.

Interrogative suggestibility in this study is measured by a Test of Suggestibility (TS). The TS measures two separate aspects of suggestibility. First, the extent to which subjects yield to suggestive questions. Second, the extent to which subjects incorporate suggested information into delayed recall.

Other variables, such as level of intellectual functioning, memory ability (as measured by an immediate and delayed recall) and attitudes about the offence on which the subject has been convicted, are also explored.

CHAPTER I

REVIEW OF THE LITERATURE

I. HISTORICAL DEVELOPMENT OF NON-HYPNOTIC SUGGESTIBILITY

Early conceptions of the idea of "suggestion" were originally formulated as a means of explaining hypnosis or hypnoidal states (Gudjonsson, 1988; Stukat, 1958). It was not until the turn of the century that Bernheim, through his works De la Suggestion et de ses Applications a la Therapeutique (1891) and Hypnotism et Suggestion (1910), presented the idea that suggestion was a normal phenomena which occurred frequently outside of the hypnoidal state. Bernheim further expanded his theory on suggestion to define it broadly as the influence that an individual can exert on another, resulting in changes in beliefs and attitudes. Bernheim viewed this phenomena as capable of occurring in both a waking state, as well as during hypnosis.

Most early research into non-hypnotic suggestibility explored the effects of suggestion on the sensory system. Examples of this are: Scripture's (1893) heat illusion, Seashore's (1895) sensory stimulation tests and Binet's (1900) progressive weights and progressive lines. All of these above studies utilized indirect suggestion to promote sensory changes. On the other hand, direct verbal instructions were used in

studies measuring the effect of suggestion on motor reaction in Chevreul's (1854) pendulum test, Strong's (1910) test of direct verbal suggestion on muscle activity, Aveling & Hargeave's (1921) had rigidity test and Hull's (1933) body sway test. Others, including Brand (1905), Whipple (1915), Fernberger (1928), Powelson and Washburn (1913) and Farnsworth and Beaumonts (1929), studied the influence of direct suggestion on perceptual and simple judgements. These studies were indicative of the inclusion of more complex phenomena than simple sensory reactions into the study of suggestion.

These early proponents of non-hypnotic suggestion made no clear distinction between suggestion and suggestibility. Suggestion was viewed as a unitary phenomena, varying only in degree of suggestibility. A distinction needs to be made in that suggestion related to a stimulus or idea, whereas suggestibility relates to the likelihood of a subject responding in a particular way (Gudjonsson, 1988). Most individuals are suggestible to some degree in that perceptual and memory processes are susceptible to distorted influences from subjective, environmental and interpersonal factors.

Despite the lack of cohesiveness in the definitions of the phenomena of suggestibility, there appears to be some consensus in the literature regarding the type of response implied by suggestibility. Generally, suggestibility implies limited critical judgement in which the subject demonstrates an uncritical acceptance of the idea(s) put forth (Coffin,

1941; Gudjonsson, 1988). This concept raises another important differentiation in the area of suggestibility: the difference between suggestibility and compliance. The two are distinguished by whether the subject accepts the suggestion despite his believing it to be false (compliance) or whether his acceptance of the suggestion is a result of his beliefs that it may be true (suggestibility). Gheorghiu (1972) stated that a necessary prerequisite for a suggestible situation is for the subject to have the alternative to engage in either suggestible or non-suggestible behaviour, otherwise, the response is coerced, and not truly an indication of suggestibility.

Eysenck and Furneaux's (1945) analysis of the results of different tests of suggestibility indicated that there were at least two independent types of suggestibility. They labelled these as primary and secondary suggestibility. Primary suggestibility referred to the tests of suggestibility which were comprised of ideo-motor tasks characterized by the subject's non-volitional movements in response to the experimenter's suggestion. Hull's body sway test and Chevreul's pendulum tests exemplify primary suggestibility.

Secondary suggestibility is not as easily defined as primary suggestibility as it includes more varied and complex phenomena than the latter. Eysenck (1947) defined secondary suggestibility as,

"the experience on the part of the subject of a sensation or perception consequent upon the direct or

implied suggestion by the experimenter that such an experience will take place in the absence of an objective basis for the sensation or perception."

The difficulty in defining secondary suggestibility has to do with the variables involved, direct versus indirect suggestion and motor versus sensory suggestibility. These variables tend to be confounded making it difficult to differentiate between primary and secondary suggestibility (Gudjonsson, 1988).

A third type of suggestibility, that of tertiary suggestibility, was also described by Eysenck and Furneaux (1945). Tertiary suggestibility referred to a perceived attitude change as a result of persuasive communication originating from a prestige figure. Of the types of suggestibility discussed above, tertiary suggestibility bears the closest resemblance to interrogative suggestibility.

II. INTERROGATIVE SUGGESTIBILITY

At the turn of the century, some interest was directed at how the form of a question effected recall and testimony (Binet, 1900; Stern, 1938). An early contribution by Binet in the area of interrogative suggestibility was in the form of a study done regarding leading questions concerning a picture which had been shown to the subjects. This procedure, utilizing leading questions, was undertaken by

other authors including Stern (1938), who demonstrated that leading questions affected responses by distorting them. This was due to the leading question being phrased in such a way that it made implicit suggestions as to what the desired response should be. Leading questions often result in a distorted response because they communicate certain expectations and premises (Richardson et al., 1965). An expectation makes reference to the interviewer indicating to the subject what response is anticipated. An expectation can be communicated through syntax and logic of the question, or by the intonation of the interviewer. The social status and prestige of the interviewer, as well as the pragmatic status of the question can also influence the recall of the presupposed facts (Dodd & Bradshaw, 1980; Gudjonsson & Clark, 1986). On the other hand, a premise refers to a proposition which serves as a foundation for a conclusion (Gudjonsson & Clark, 1986). A question contains a premise when it relies upon prior information and builds upon it (Richardson et al., 1965). Almost all questions contain a premise, but not all questions contain expectations.

Subsequent studies, including Burtt (1948), Trankell (1958), Powers et al. (1979) and Cohen and Harnick (1980), utilized leading questions in a similar manner to Binet and Stern. Despite the apparent relatedness of these studies to what is now known as interrogative suggestibility, they fail to provide a comprehensive definition of interrogative suggestibility, and have not developed an objective psychometric instrument for quantitatively measuring it

(Gudjonsson, 1988). Gudjonsson and Clark (1986) define interrogative suggestibility as: "the extent to which, within a closed social interaction, people come to accept messages communicated during formal questioning, as the result of which their subsequent behavioural response is affected." Gudjonsson and Clark's definition of interrogative suggestibility is the one which shall henceforth be used.

This definition contains five interrelated elements : the nature of the social interaction, a questioning procedure, a suggestive stimulus question, some form of acceptance of the stimulus message and a behavioural response (Gudjonsson & Clark, 1986). The fact that an interrogative situation relies on the recall of an event or experience (either factual or opinion of such event), memory recollections and knowledge states are of crucial importance. This factor makes interrogative suggestibility different from the traditional concepts of suggestion discussed previously, as they are almost exclusively concerned with motor and sensory experiences of the immediate situation (Gudjonsson & Clark, 1986).

III. INTERROGATIVE SUGGESTIBILITY- A THEORETICAL MODEL

Gudjonsson and Clark (1986) present a model of interrogative suggestibility. Although they address primarily a social-psychological model of a police

interrogation situation, their model is generally applicable to other similar interrogative situations.

The model, which will be discussed further below is illustrated in Figure 1 (Gudjonsson & Clark, 1986). The model of interrogative suggestibility commences with a definition of the social situation and the participants involved. The model goes on to define the general cognitive set of the interviewee. This cognitive set leads to the interviewee adopting a general coping strategy which results in either a suggestible or resistant response set. The cognitive processing of a question involves uncertainty, interpersonal trust and expectations on the part of the interviewee, in response to the question. The model conceptualizes these three components as essential prerequisites for the suggestibility process to occur. The result of the cognitive processing of the question is a cognitive appraisal which results in either a suggestible or resistant behavioural response. A suggestible cognitive coping strategy does not necessarily result in a suggestible behavioural response. The cognitive appraisal may lead to a resistant behavioural response. The reverse is also true for a resistant general coping strategy. After the interviewee gives an answer (behavioural response), he may receive feedback, either positive or negative. The effects of the feedback influence the next general cognitive set and general coping strategy of the interviewee in preparation for the next question (Gudjonsson & Clark, 1986).

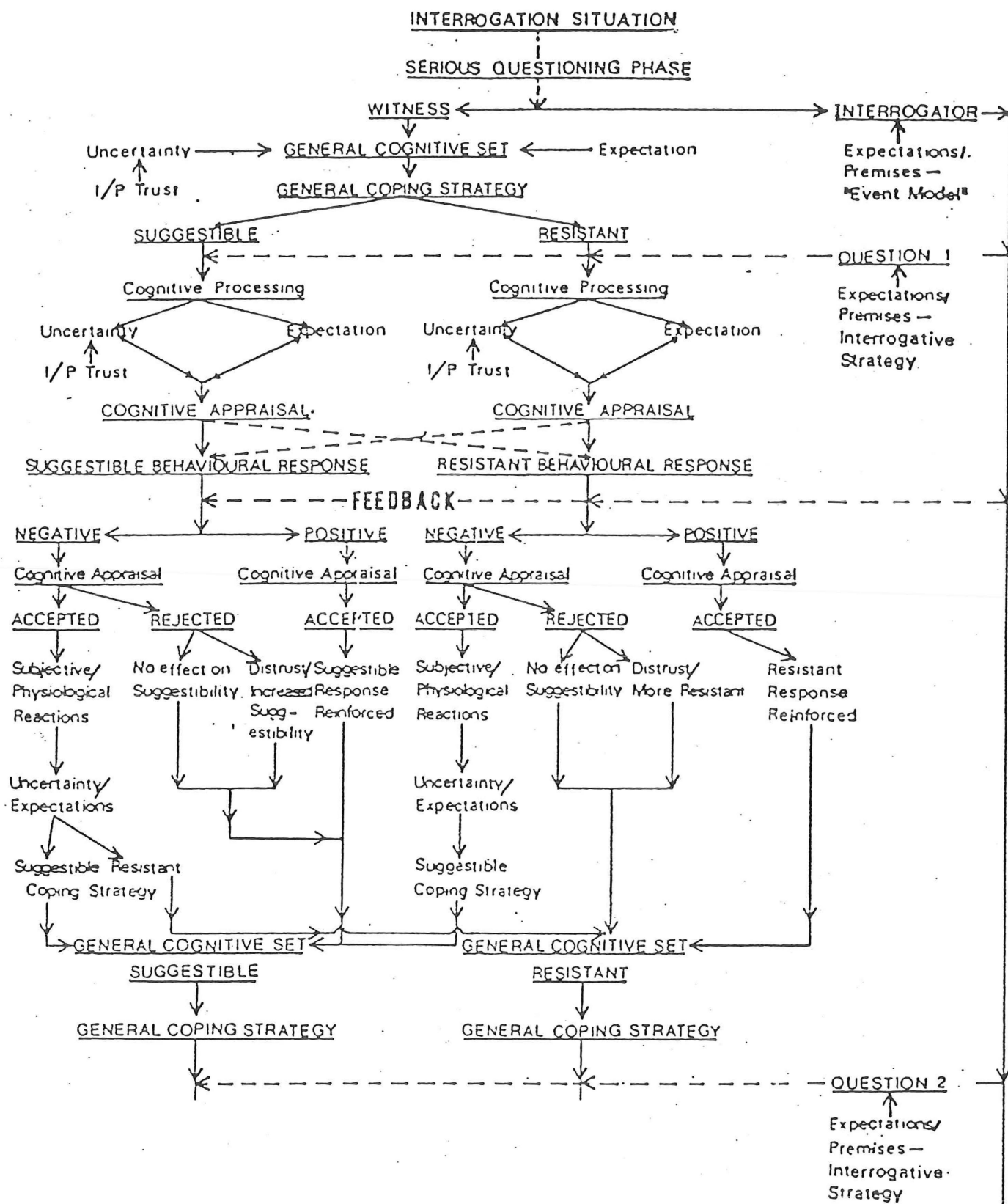


Figure 1. A theoretical model of interrogative suggestibility.

An interrogative situation is a closed social interaction made up of two or more people, which includes an interviewer and an interviewee.

An interrogative situation implies that one party, the interviewer, is seeking information from the interviewee. The interviewee may or may not be in possession of the information. An interrogative situation takes the form of questions and answers. Questions may or may not be specific, closed, open, leading or include false alternatives. Answers may or may not be accurate, specific or truthful.

An interviewee enters into an interrogative situation with a certain general cognitive set, meaning that he enters into the situation with existing general expectations relative to perceiving, thinking, remembering and social information. The general cognitive set is affected by the individual's own past experiences, attitudes, expectations, motives and beliefs, which can lead to a tendency for the interviewee to perceive what he expects, desires or needs to see in the interrogative situation (Gudjonsson & Clark, 1986; Haward, 1963). According to Gudjonsson and Clark's model, the general cognitive set of an interviewee as he enters the interrogative situation influences his subsequent coping strategies and behavioural responses.

Closely related to the idea of general cognitive sets are cognitive styles. These are the means by which individuals process information i.e., the way they think, perceive and

remember (Moos & Billings, 1982). Cognitive styles are more stable than general cognitive sets, as the latter tend to be situational in nature (Haward, 1963). One particular cognitive style, that of 'field orientation' (Witkin et al., 1971), is important to the area of interrogative suggestibility for two reasons. First, field-independent individuals tend to be more successful in situations which require logical and critical analysis, whereas, field dependent people rely more on an external frame of reference (Witkin & Goodenough, 1977). Second, field-independent individuals are more likely to express aggression directly against others, whereas, field dependent people tend to express those feelings indirectly (Gleser & Ihilevich, 1969). Therefore, it is likely that the cognitive style of field orientation influences the general coping strategy an interviewee adopts in an interrogative situation (Gudjonsson & Clark, 1986).

When in an interrogative situation, people cognitively evaluate and adopt some means of coping with the situation. The action used as the means of resolving the situation is the coping strategy (Ray et al., 1982). These coping strategies are not necessarily consciously directed and can be both cognitive and behavioural (Gudjonsson & Clark, 1986).

Coping resources are a complex set of personality, attitudinal and cognitive factors and are relatively stable characteristics of the individual (Moos & Billings, 1982; Gudjonsson & Clark, 1986). Factors such as intellectual

functioning, memory capacity and those related to self-concept, such as self-esteem and self-efficacy, are of interest to coping and suggestibility (Gudjonsson, 1983; Gudjonsson & Lister, 1984; Singh & Gudjonsson, 1984).

When an individual enters an interrogative situation, he possesses a range of cognitive resources which provide the psychological context for coping with the situation. The coping strategies which the interviewee adopts prior to the commencement of the actual interrogation can be either facilitating or resistant to the suggestibility process. In Gudjonsson and Clark's model, these are labelled suggestible and resistant coping strategies respectively.

(1) The Conceptual Model of Coping

The conceptual model for coping adopted by Gudjonsson and Clark in their model of interrogative suggestibility is that described by Billings and Moos (1981) and Moos and Billings (1982), in which the method and focus of coping are separately classified. Methods of coping are placed in the following three groups: (i) active-cognitive, in which the individual attempts to manage his thoughts and appraise the situation; (ii) active-behavioural, which makes reference to overt attempts to deal directly with the situation and (iii) avoidance-coping, which refers to cognitive or behavioural attempts to avoid confrontation with the stressor in the situation. The active-cognitive and active-behavioural methods are likely to result in the interviewee responding in

a critical and resistant fashion, whereas, the avoidance-coping facilitates a suggestible response, which ends to impair effective functioning (Gudjonsson & Clark, 1986).

The focus of coping also falls into three groups, according to their primary focus. The first of these domains is: (i) appraisal-focused coping. In this instance, the individual attempts to define the meaning of the situation, including a logical analysis in which the individual critically and logically analyzes the situation by drawing on past experience. In addition to this, the individual also mentally rehearses possible actions and attempts to recognize their consequences. As well as this, in appraisal focused coping, the individual attempts to define the meaning of the situation, utilizing cognitive avoidance strategies. This involves denial and wishful thinking, rather than a realistic appraisal. The second focus is that of (ii) problem focused coping. With this, strategies such as seeking information or advice, or utilizing problem solving actions are undertaken. The final focus is (iii) emotion-focused coping. This involves recognizing and managing the emotions which arise as a result of the interrogation.

The specific type of strategy utilized depends upon the individual's appraisal of the interrogative situation and their options for coping and anticipating the consequence. Gudjonsson & Clark's model adopts the view that coping strategies are dynamic and may be modified as the interviewee re-appraises his situation throughout the interview.

(2) The Questioning Process

The first step in the suggestion process is individual decision making. In an interrogative situation, an individual has to make two decisions when asked a question. These decisions are whether to answer or not, and how to answer (Gudjonsson & Clark, 1986). The decision of how to answer the question is crucial to the process of suggestibility, as it helps determine whether the question will be answered or not. The main antecedents for a suggestible response are uncertainty, interpersonal trust and expectations, as these form the basis for the theoretical framework presented in this model for conceptualizing the psychological process involved in interrogative suggestibility (Gudjonsson & Clark, 1986). This will be discussed further below.

A leading question in an interrogative situation may often create doubts in the mind of the interviewee. Normally in an interview situation, if there exists definite conflict between what the interviewee remembers and what is implied in a question, he will give an answer which he feels to be accurate, unless expectations and premises contained in the question create doubts in his mind (Gudjonsson & Clark, 1986).

(3) Uncertainty

Uncertainty within the context of interrogative suggestibility refers to not being definite as to what the correct answer is. This is in relation to the individual's strength of internal frame of reference and knowledge states, rather than feelings of confidence. Acceptance of a suggestive question is likely to be facilitated when it is in agreement with the existing structure of the individual. However, if the situation is not well structured in terms of the cognitive factors mentioned above and situational determinants such as ambiguity of the question, then it is probable that uncertainty will be high and will increase the likelihood that the individual will use external cues as a frame of reference when answering (Gudjonsson & Clark, 1986).

Uncertainty must be present for a suggestible response to occur, although, on its own, it is insufficient to cause an individual to be susceptible to a leading question.

According to Gudjonsson and Clark's model, uncertainty must be accompanied by interpersonal trust as a prerequisite to suggestibility (Gudjonsson & Clark, 1986). This will be discussed below.

(4) Interpersonal Trust

Even under situations of increased uncertainty, individuals are unlikely to yield to a leading question unless they believe that the interviewer's intentions are genuine and that they are not being tricked (Gudjonsson &

Clark, 1986). Additionally, if the individual detects that the questions are obviously misleading, he will become more resistant to subsequent leading questions (Loftus, 1979b).

(5) Expectations of Success

Uncertainty and interpersonal trust on their own are also insufficient to make an individual yield to a leading question; certain expectations of success in ability to answer the question must also be present. If there are no expectations present, an individual is able to declare uncertainty in response to a leading question, i.e. by answering "I don't know" or "I'm not sure". However, if the individual holds one or all of the beliefs that (i) he must provide an answer for the question, (ii) he should know what the answer is and (iii) he is expected to know the answer and is capable of giving it, he may be reluctant to answer with a reply indicating uncertainty (Gudjonsson & Clark, 1986).

According to Gudjonsson and Clark's model of interrogative suggestibility, most people are suggestible to some degree, if uncertainty, interpersonal trust and expectations of success are present. According to the model, this is a function of the individual's appraisal of the situation and the type of coping strategy adopted. A suggestible coping strategy involves cognitive avoidance and lack of facilitative problem solving actions. A suggestible individual is likely to, rather than admitting uncertainty, to give answers which appear plausible and consistent with

the external cues evident. On the other hand, a non-suggestible coping strategy involves a critical analysis of the situation and a facilitative problem solving action (Gudjonsson & Clark, 1986).

(5) Feedback

In an interrogative situation, after an individual replies to a question, he usually receives some form of feedback. Feedback is generally intended to strengthen or modify the individual's subsequent responses. Feedback can be positive or negative, or explicit or implicit. Feedback can also be verbal, or non-verbal. Feedback, particularly negative feedback, can have a strong effect on the subsequent behaviour of the interviewee (Gudjonsson, 1984a). Negative feedback generally results in the interviewee changing his previous response and heightens his susceptibility to further leading questions, provided he was suggestible in the first place (Gudjonsson & Clark, 1986; Gudjonsson, 1984a). Negative feedback can be given either after each question is answered or after an entire set is answered. The latter is likely to have a more pervasive effect on the individual's psychological state, as unlike the case of feedback after each response, the individual is left unclear as to which responses must be changed in order to improve his performance, thus serving to increase uncertainty (Gudjonsson & Clark, 1986). Gudjonsson and Clark's model focuses on either positive or negative feedback given question-by-question.

Following an interviewee's response, the interviewer provides either negative or positive feedback. For the feedback to have an effect, it must be understood. The outcome of the feedback is related to previous behavioural responses of the interviewee. The four possible outcomes according to Gudjonsson and Clark's model are as follows:

(i) Suggestible behavioural response followed by positive feedback. In this instance, provided the feedback is accepted and reinforces previously given suggestible responses, it results in a general cognitive set which is more susceptible to suggestive influences during later interrogation. This effects the individual's general coping strategies, which become less problem-solving and reality oriented.

(ii) Resistant behavioural response followed by positive feedback. In this instance, if positive feedback is accepted, it reinforces the resistant behavioural response. This results in the individual's general cognitive set becoming more resistant to additional suggestions and an increase in problem-focused and reality oriented coping.

(iii) Resistant behavioural response followed by negative feedback. According to Gudjonsson and Clark's model, in practical terms, this outcome is the most important in so far as feedback concerns interrogative suggestibility.

Following the cognitive appraisal, the individual may either accept or reject negative feedback. According to the model, when feedback is rejected, it will have minimal effect on

subsequent suggestible responses, although, it may have the effect of making some individuals less co-operative during subsequent questioning, or suspicious that they are being "tricked".

If the negative feedback is accepted, it may result in mood changes and physiological reactions, which serve to increase uncertainty. Negative effects on self-esteem in particular may make it increasingly difficult for the interviewee to draw on facilitative coping strategies, making it likely that the individual attempts to draw on external cues, rather than relying on his internal frame of reference. Due to the impact of negative feedback, the interviewee is apt to utilize "emotion focused coping" to maintain affective equilibrium. If the individual passively accepts the negative feedback, he is likely to become increasingly susceptible to replying with suggestible responses. The outcome of this process changes the general cognitive set and general coping strategies of the individual during subsequent interrogation (Gudjonsson & Clark, 1986).

Acceptance of the negative feedback does not necessarily lead to a suggestible general cognitive set, although generally, this is likely. Some individuals, in accepting negative feedback, utilize a coping strategy that leads to a resistant general cognitive set, or may view the negative feedback as a challenge to improve, resulting in a more cautious approach to subsequent interrogation (Gudjonsson & Clark, 1986).

(iv) Suggestible behavioural response followed by negative

feedback. Negative feedback to a suggestible response is likely to occur less frequently than the other three possible outcomes. Its rarity is due in part to the conflicting messages it gives the interviewee. The interviewee is "cued" as to how to respond by the message contained in the leading question, however, the reply to the "cued" answer indicates to the interviewee that he has not indeed responded in the correct way, despite having responded in the direction of the "cue". These contradictory messages are likely to confuse the interviewee and serve little purpose in a general interview situation, except to heighten uncertainty even further.

However, negative feedback to a suggestible response may be applied in at least two circumstances. The first being when an interviewee answers only some questions in a suggestible manner and the interviewer wishes to elicit more suggestible responses. The second instance is when an interviewee has responded to a false alternative question, but has not responded with the desired alternative because the question was not structured in a way as to indicate the desired alternative. Highly suggestible individuals in this situation often respond by changing their answer to the other alternative, due to the limited response choice allowed in a false alternative question (Gudjonsson & Clark, 1986; Gudjonsson, 1986). In accordance with Gudjonsson and Clark's model, rejection of the negative feedback may result in no effect on subsequent suggestibility, or it may result in an increased susceptibility to leading questions, as the

individual comes to distrust future feedback and relies on expectations and premises contained in the questions. In both cases, rejection of the feedback leads to a suggestible general cognitive set.

If negative feedback is accepted, two possible outcomes arise. The interviewee may respond with another false alternative or, yield to more of the leading questions. This leads to a suggestible general cognitive set. However, if the questions are closed and the individual's options are limited, he may move towards a resistant general cognitive set if the negative feedback is accepted.

IV. THE GUDJONSSON SUGGESTIBILITY SCALE (GSS)

Although the concept of interrogative suggestibility was introduced by Binet (1900) at the turn of the century and was expanded upon by others (e.g., Stern, 1938; Burt, 1948; Trankell, 1958), there was no suitable psychometric instrument for quantitatively measuring it (Gudjonsson & Gunn, 1982). It was in part, due to this that the Gudjonsson Suggestibility Scale (GSS) was developed (Gudjonsson, 1984a). The GSS was constructed to assess both an individual's response to leading questions and also, to negative feedback instructions. Generally, the GSS is intended to measure the tendency to yield to leading questions and to shift previous answers in response to negative feedback or interpersonal

pressure (Gudjonsson, 1984a). The GSS is an indirect test of suggestibility as it is presented as a memory test. It has been shown to have high test-retest reliability i.e., temporal stability over one month's time span (Gudjonsson & Clark, 1986; Gudjonsson, 1986). The GSS contains a theoretically-valid construct relevant to interrogation contexts. Through several studies, the construct validity of the GSS has been demonstrated, i.e., Gudjonsson, 1984a; Gudjonsson & Clark, 1986; Gudjonsson & Lister, 1984; Gudjonsson & Singh, 1984; Haraldson, 1985).

The construction of the GSS is such that the suggestible context consists of a story, which is verbally presented to the subject prior to the actual questioning. After the verbal presentation, the story is scored for immediate memory recall, in a way similar to the Wechsler Memory Scale. See Appendix A for the context of the story on the GSS.

Prior to the story being read out, the following instruction is given to the subject:

"I want you to listen to a short story. Listen carefully because when I am finished I want you to tell me everything you remember about the story."

After the story has been read, the subject receives the following instruction:

"Now tell me everything you remember about the story."

This gives an immediate free recall which is scored for number of correct ideas recalled.

The suggestibility scale consists of 20 questions based on

the content of the story. The subject is told that he is to answer, as accurately as possible, some questions regarding the story. Fifteen of the 20 questions have a suggestible content, and five are "true" questions. The suggestible questions are of three general types: (i) Leading questions. The leading questions were constructed so they did not contain strong expectations. Rather, they included one or more salient premises so expectations were created, making a suggestible reply to appear quite plausible, e.g., "Did the woman's glasses break in the struggle?" (ii) Affirmative questions. These questions contained no obvious salient premise, but tended to have a suggestible effect in that they had an affirmative response bias, e.g., "Did one of the assailants shout at the woman?" (iii) False alternative questions. These questions were constructed to imply the presence of objects, persons and events that were not contained in the story. The subject is presented with a choice of two alternatives, A or B, when neither is in fact correct.

See Appendix B for the content of the suggestibility scales.

The five "true" questions in the GSS are included to conceal the real purpose of the scale. They are not scored and have no theoretical relevance to suggestibility as measured by the GSS. The remaining 15 questions are designed to measure how much the individual gives in, or yields, to suggestible questions.

The subject's likelihood to yield to suggestions made through pressure, rather than questioning in the interrogation process, is measured by firmly instructing the subject immediately upon completion of the questions that,

"You have made a number of errors (in the first trial of the 20 questions). It is therefore necessary to go through the questions once more, and this time try to be more accurate."

The entire 20 questions are then repeated and any distinct change in reply as compared to the initial answers is noted for scoring. This excludes the five "true" questions. The extent to which the subject's response can be "shifted" by the pressured instructions serves as a second index of suggestibility.

After the shift score has been obtained, a delayed free memory recall of the interrogative context is requested. Gudjonsson (1983) suggests a 40-50 minute delayed recall as accuracy of recall is affected by time intervals (Loftus, 1979a). This is important as the less a subject remembers about the story, the less likely he is to trust his own judgement, i.e., the higher his uncertainty will be and therefore rely more on external cues. The subjects who recall less about the story are more likely to come under greater suggestive pressure. Knowledge of memory recall ability provides additional data that can aid in the interpretation of the GSS scores (Gudjonsson, 1984).

The GSS is scored on two terms: memory recall and suggestibility. The memory recall is scored on both the

immediate and delayed free recall. Though these scores are not used in scoring suggestibility, as stated above, they provide useful information regarding the subject's ability for recall of the interrogative context (the short narrative paragraph). The scale provides three suggestibility scores: yield, shift and total. The total score is the combined score of the number of leading questions answered affirmatively and false alternatives given added to the number of distinct changes in answers after the pressured instructions have been given, i.e., yield + shift score.

Gudjonsson (1984) found the two types of suggestibility (yield and shift) to be poorly correlated and to load on separate factors, indicating that they appear to be quite independent. It was also demonstrated by means of principal-component analysis, that the two types of suggestibility are reasonably homogeneous and have satisfactory internal--consistency reliabilities. The reliability was higher for the yield score, which suggests that the shift score is somewhat less homogeneous than the yield (Gudjonsson, 1984).

V. RELATIONSHIP BETWEEN INTERROGATIVE SUGGESTIBILITY AND OTHER VARIABLES

(1) Acquiescence

Acquiescence refers to the tendency of individuals to answer in an affirmative fashion regardless of the content of the question (Cronbach, 1946). Interrogative suggestibility and acquiescence share the common feature of being concerned with obtaining false information in response to a question. However, though both of them are tested by means of questionnaires, in the case of acquiescence, the questions are not generally structured in such a way as to indicate a desired answer (Gudjonsson, 1986). Despite this, questions which require a simple yes-no answer tend to have an affirmative response bias, in that if a subject is in doubt, he may answer questions affirmatively (Siegelman et al., 1981). Therefore, as in interrogative suggestibility, uncertainty is an important prerequisite for an acquiescent response set (ARS) to occur (Siegelman et al., 1980; Siegelman et al., 1981; Gudjonsson, 1986). An ARS is also associated with poor intellectual functioning (Siegelman et al., 1980). Gudjonsson (1986) demonstrated that, despite the similarities between interrogative suggestibility and acquiescence, they had only a weak positive correlational relationship. Gudjonsson reasoned that both uncertainty and self-concept evaluations were relevant to suggestibility and acquiescence. Theoretically, the uncertainty and reduced self-esteem results in a negative state of psychological arousal (Kiesler & Pallak, 1976; Gudjonsson, 1986). The reasoning behind this is that once the negative feedback has been administered after questioning, cognitive uncertainty is increased. This uncertainty is a function of the subject learning (through the feedback) that many of his answers are

wrong and must be improved. However, he is unaware of which answers or how many are incorrect, which serves to further increase uncertainty. The negative feedback on the GSS and subsequent resulting uncertainty also produces a 'mismatch' between present and previous (before questioning and feedback) self-concepts, which in turn leads to lowered feelings of self-worth. In order to restore self-esteem, the subject is motivated to take action to improve his self-evaluation. This negative arousal motivates the individual to try and reduce uncertainty and to improve self-esteem. As affirmative answers are perceived by the subject to be more acceptable to the interviewer and are less likely to be challenged than "no" and "don't know" answers (Richardson et al., 1965), an affirmative answer may help to reduce negative arousal (Gudjonsson, 1984). A second explanation for this may be that affirmative answers are more easily incorporated into the individual's memory recollection than "no" and "I don't know" answers (Richardson et al., 1965), thus giving an affirmative reply may help reduce the individual's doubts and uncertainties created by the feedback process (Gudjonsson, 1986). Therefore, unlike acquiescence, in the case of interrogative suggestibility the subject does not give a positive answer regardless of the content of the question. Rather, the subject is likely to demonstrate a higher tendency to acquiesce after the presentation of negative feedback.

(2) Intelligence, Memory Recall and Personality

As in the case of an ARS, interrogative suggestibility

is significantly negatively correlated with intelligence as assessed by the Wechsler Adult Intelligence Scale (Siegelman et al., 1980; Gudjonsson, 1983; Gudjonsson, 1987b). However, range of intellectual functioning is important in the relationship between interrogative suggestibility and intellectual functioning. The correlation between intellectual functioning and interrogative suggestibility is stronger among subjects of below average intellectual functioning (Gudjonsson, 1988b). Gudjonsson (1988b), in response to two studies which found no significant relationship between IQ and interrogative suggestibility (Powers et al., 1979; Tata, 1983), demonstrated that IQ scores above 100 did not correlate significantly with suggestibility, even when the range was not restricted (e.g., a range of FSIQ 101-140). Thus Gudjonsson (1988b), supported his hypothesis in the study that range effects were evident in the correlations between intelligence and interrogative suggestibility.

Theoretically, interrogative suggestibility is dependent upon the coping strategies of the individual. Intellectual functioning effects the individual's cognitive appraisal of the situation and the subsequent coping strategy adopted (Gudjonsson & Clark, 1986). Gudjonsson's (1988b) findings regarding IQ and suggestibility suggest that adequate appraisals and coping strategies can be achieved by most subjects of average intellectual functioning, after which, other variables become more prominent.

Gudjonsson (1987b) also found interrogative suggestibility to have a moderately high negative correlation with memory recall ability. Suggestibility was also found to be statistically related to personality variables such as neuroticism and social desirability, as assessed by the Eysenck Personality Inventory. The subjects' ratings of confidence in their answers was not strongly correlated with suggestibility. However, this is somewhat indicative of the unreliability of self-reported confidence levels (Gudjonsson, 1987b).

(3) Assertiveness, Social-Evaluative Anxiety, State Anxiety and Method of Coping

As suggested above, the majority of subjects with average intellectual functioning can achieve adequate cognitive appraisals and coping strategies, after which, other variables become more prominent (Gudjonsson, 1988b). In an additional study, Gudjonsson (1988a), found that assertiveness, evaluative anxiety and state anxiety, assessed using the Rathus Assertiveness Schedule(RAS), The Fear of Negative Evaluation(FNE) and Social Avoidance and Discomfort Scales and the Spiel State Anxiety Inventory(SAI), respectively, appeared to be important mediating variables with respect to suggestibility. They were found to have moderately high correlations with suggestibility. Theoretically, fear of negative evaluation is related to the expectation component of suggestibility, whereby, subjects do not declare their uncertainty due to fear of disapproval.

They attempt to cover up their lack of knowledge by providing what they believe to be a plausible answer (Gudjonsson, 1988a).

Assertiveness related more to the coping strategies that the subject uses in dealing with uncertainty. A moderately high negative correlation ($r=-0.53$) was demonstrated between the RAS and the FNE, indicating that the two scales shared inversely related behavioural characteristics (Gudjonsson, 1988a).

State anxiety was found to be more related to interrogative suggestibility than trait anxiety, which has been found to correlate poorly with suggestibility (Gudjonsson, 1988a; Gudjonsson, 1983). Correlations were higher during a second administration of the SAI, indicating the importance of transitory emotional states during interrogation, i.e. that the interrogative process is dynamic. The correlations between suggestibility and state anxiety were also higher after negative feedback instruction, supporting the idea that yield and shift scores are linked with anxiety and coping processes (Gudjonsson, 1988a).

VI. INTERROGATIVE SUGGESTIBILITY IN CRIMINAL POPULATIONS

Although a good deal of work has been undertaken on the subject of suggestibility in forensic uses of hypnosis, little has been done in the area of interrogative suggestibility in forensic or criminal populations (Royal Commission on Criminal Procedure, 1980). In a study on the relationship between the number of previous criminal convictions and interrogative suggestibility among delinquent boys, Gudjonsson and Singh (1984) theorized that a negative relationship between the variables should exist for two reasons. Firstly, individuals who have had extensive experience with interrogative situations may gradually learn to resist interpersonal pressure during interrogation and secondly, recidivist offenders may be characteristically more prone to resisting interpersonal pressure. Some empirical evidence exists supporting the idea that individuals with a criminal record are more resistant to interrogative pressure and are less likely to make admissions than first time offenders (Irving, 1980; Softley, 1980).

The results of Gudjonsson and Singh's (1984) study supported the hypothesis, in that number of convictions was found to have a negative correlation with the ability to resist interpersonal pressure during interrogation. Interestingly though, memory capacity for verbally presented information, as measured by the Immediate Recall score, and tendency to be swayed by leading questions (Yield score) were not found to

be significant variables. The study also found that adolescent males were no more likely to respond to suggestible questions than "normal" males, unless interpersonal pressure in the form of negative feedback was presented.

It would appear then, that some subjects are more critical in an interrogative situation and have learned to rely on their own judgement when dealing with ambiguous situations. It is likely, in the case of individuals with criminal records, that their familiarity with an interrogative situation gives them a more tangible frame of reference to judge the situation from and thus makes it less likely that they yield to interpersonal pressures and strategies (Gudjonsson & Singh, 1984).

In another study by Gudjonsson (1984), a comparison of suggestibility between "false confessors" and "deniers" (both groups having been convicted as having committed a criminal offence), was made. Gudjonsson found that "false confessors", those who had been pressured into confessing to a crime which they had not perpetrated, were significantly more suggestible than "deniers". "Deniers" were classified as those who had consistently denied their involvement in a crime despite forensic evidence against them, and "false confessors" being those who admitted to a crime and then later retracted their confession.

The suggestibility scores for the "deniers" in Gudjonsson's

study were extremely low, not only in comparison to the "false confessors", but also in comparison to "normal" males (the male sample used in Gudjonsson, 1983). On average, the "deniers" scores were almost four points below that of "normal" males. The "deniers" were found to be exceptionally resistant to leading questions and interpersonal pressure. Interestingly, when the "deniers" did change their answers after pressuring feedback, they tended to give in less to the suggestive question. On the other hand, "false confessors" generally responded to pressure with increased suggestibility. Although the "deniers" presented with higher intellectual functioning than the "false confessors" ($M=98.5$ FSIQ as compared to $M=80.5$ FSIQ, respectively), this difference is unlikely to account for the group differences in suggestibility (Gudjonsson, 1984).

VII. INTERROGATIVE SUGGESTIBILITY IN AN IMPRISONED SEXUAL OFFENDER POPULATION

Although there are a few studies regarding interrogative suggestibility in the criminal population in general, at present, there are none regarding interrogative suggestibility in specified offender groups, specifically, in sexual offender populations.

Interest for this study regarding interrogative

suggestibility in differentiated imprisoned populations arose in part from research examining emotional recognition ability undertaken by Hudson, Wales and Bakker (1989). Hudson et al., found particularly low levels of intellectual functioning among sexual offenders as a group as compared to violent offenders and offenders imprisoned for crimes involving dishonesty. In view of the relationship between intellectual functioning and interrogative suggestibility, it would appear likely that sexual offenders would exhibit higher levels of interrogative suggestibility than other offender groups.

In the present study, sexual offenders were further differentiated into two groups: pedophiles and rapists. The criteria for inclusion in these groups will be expanded upon below. The reason for this differentiation is that it is hypothesized in this study that pedophiles, in particular, are likely to demonstrate higher levels of interrogative suggestibility than other offender groups.

In recent years, sexual offences against children (offences perpetrated by pedophiles), have become subject to increasing public awareness. In New Zealand, sexual offences against children are considered serious crimes and often result in prison sentences. The seriousness of this type of crime is reflected in the availability of Preventive Detention, the maximum sentence available in the case of a sexual offence against a child. The earliest review date for release from prison in this case is ten years, with the condition of life parole if released. Public opinion is strongly against the

sexual offender in the majority of cases. This is reflected in recent media coverage of cases where a child has been a victim of a sexual offence. Society as a whole endorses many negative myths about sexual offenders, such as them being "depraved", psychiatrically disturbed and a potential threat to all children (Pithers, Beal, Armstrong, & Petty, 1988). In part, as a result of this social pressure placed upon them, many sexual offenders are reluctant to admit responsibility for their offence (Pithers et al., 1988). In addition to this general social pressure, individuals who have committed a sexual offence against a child often come under additional pressure as a result of their contact with the Justice system.

Once convicted of a sexual offence against a child and sentenced to a term of imprisonment, the sexual offender comes under additional pressure. Sexual offenders in non-specialist prisons are subject to a varying degree of interpersonal pressure from other inmates.

Sexual aggressors tend to deny, minimize or distort self reported information (Pithers et al, 1988). As a result of social pressure, interpersonal pressure (from other inmates) and stigma attached to having committed a sexual offence against a child, many sexual offenders deny responsibility for the offence. As Salter (1988) pointed out, denial amongst sexual offenders is not an all-or-none situation. Rather, it is on a continuum. The offender can deny responsibility for the entire offence, claim responsibility

for only some aspects of it, deny particular details of the alleged offence, minimize victim impact, blame the victim or minimize personal responsibility as a result of having been in a drug altered state (Pithers et al, 1988).

Regardless of where the sexual offender's denial lies on the continuum, treatment cannot take place until the offender admits that the offence occurred. The offender must admit a problem exists before intervention to deal with the problem ensues (Pithers et al., 1988).

Although Gudjonsson (1984) found that "deniers" in a criminal population which included sexual offenders, (the victims' ages were not specified) proved to be exceptionally resistant to both leading questions and interpersonal pressure, it is hypothesized in this study that pedophiles, because of their style of denial and social pressure exerted upon them, will not demonstrate the same resistance to interrogative suggestibility.

In accordance with Gudjonsson and Clark's (1986) model of interrogative suggestibility, the individual enters into an interrogative situation with a general cognitive set, which is situational in nature. This cognitive set subsequently influences the individual's coping strategies and behavioural responses. More so than other offender groups, a pedophile enters into an interrogative situation having been convicted of an offence which is highly personally reinforcing to themselves, often denying the offence to some degree, often

presenting with rationalizations about the offence and most importantly, having the knowledge that sexual offences against children are particularly abhorred by society at large. Sexual offenders are generally of lower intellectual ability and often present with low self-esteem. Because of their general cognitive set, intellectual ability and self-esteem, pedophiles may be more likely to fear further negative evaluation. This is related to the expectancy component of suggestibility in that the offender is unlikely to declare his uncertainty due to fear of disapproval. The offender then attempts to cover for his lack of knowledge by providing what he perceives to be a plausible answer. In order to provide a plausible, acceptable answer, the offender must rely on external cues. In the case of interrogative suggestibility, external cues are generally provided in the form of leading questions and feedback. Thus, the pedophile is likely to prove to be suggestible despite high levels of denial.

Although non-violent criminal offences and rape are, by their very nature, not socially acceptable behaviours, they are not viewed with the same magnitude of negativity as sexual offences against children. Therefore, it would be anticipated that these non-pedophilic offenders would enter into an interrogative situation with a different cognitive set than that of pedophiles, and subsequently prove to be less suggestible than the pedophilic group, despite the possibility of similar inter-group intellectual abilities.

In addition to the likelihood of pedophiles demonstrating a higher "yield" to suggestible questions, a second aspect of suggestibility was investigated in this study: the propensity of offenders to incorporate suggested ideas into the context of delayed recall of previously presented information.

In studies of interrogative suggestibility using the GSS, the second suggestibility score, "shift", was obtained after pressured negative feedback instructions. In this study, an attempt was made to re-create an interview situation as realistically as possible. Rather than provide pressured negative feedback after the presentation of the leading questions, a verbatim review of the answers given was provided. It was felt that this more closely paralleled existing interrogative practices. A delayed free recall, similar to that used in conjunction with the GSS was later called for. This delayed recall was then scored for number of suggested ideas incorporated into its context.

Loftus (1979a) points out that the acquisition of incorrect knowledge can have a major distorting effect on testimony over time. This process is effected by several factors, the main one of importance here being distortions which occur as subsequent new information affects the retention and retrieval process. Post event information can distort the original memory and can lead to inaccuracies during retention and retrieval. Specific questions can result in particular biases in this instance (Loftus, 1979a; Gudjonsson & Clark, 1986).

By the time a sentenced and imprisoned offender comes to be seen in a clinical interview with a psychologist, it is likely that he has participated in several interrogative situations including, one or more interrogations by the police, possibly an interview with a social worker, one or more legal consultations, an interview with a probation officer, the actual court case, an interview upon being received into the prison and in many New Zealand prisons, a "case management committee" interview. This of course is in addition to other "informal" interrogation by family friends, other inmates and possibly, the press. All of these interrogators have varying abilities and skills for interviewing. Some may unwittingly, or purposely, attempt to bias an interview by means of leading questions or biased feedback, for example, to gain a "confession" or a conviction, as during a court case, or more informally, for example, supporters of the offender trying to minimize the offence i.e., "You didn't really do it, did you?"

Throughout these interrogative processes, the offender is likely to come into contact with a good deal of new information regarding his offence and/or his case. This information may or may not be accurate. This post event information can distort the original memory of the offence and can subsequently result in inaccuracies in recall. Hypothetically this may be particularly relevant when the offender comes into contact with information which is positively reinforcing regarding himself. This may create a

positive "self-bias", which the offender unwittingly incorporates into his post event recollection because of its perceived reinforcing nature.

As with the tendency to yield to suggestible questions, it is hypothesized here that individuals who have been convicted of a sexual offence against a child, will be more likely to incorporate post event information into memory recall. It needs to be distinguished that this incorporation of post event information may or may not be done with the conscious intent on the part of the offender to present himself in a more favourable light. The emphasis is that the incorporation of this information may have an effect on actual ability for retention and retrieval at a later time.

As with the tendency to yield to leading questions, the cognitive set, intellectual ability and self-esteem of the pedophile make it more likely that he will attempt to present in a more acceptable and favourable fashion. If post event information is perceived to have a positive bias, and the individual has demonstrated a tendency to yield to suggestible information as presented in the leading questions, it is hypothesized that he will incorporate the positively biased information, as perceived through external cues (leading questions) into the delayed recall of the suggestible context.

This aspect of incorporation of suggested information into delayed recall is of particular relevance to the clinical

interview with a pedophile. The importance of gaining a truthful and accurate presentation of the events surrounding the offence has been discussed above. If pedophiles are indeed more likely to incorporate perceived positively biased post event information into their memory recall, it has important implications regarding clinical interviews with sexual offenders.

CHAPTER II

MATERIALS AND METHODS

I. SUBJECTS AND SETTING

Forty-five males imprisoned in two medium security and one minimum security prison served as voluntary participants for this study. A non-prison control group consisted of 15 males who volunteered to participate. Fourteen of the males were New Zealand Air Force personnel and one was a university student.

The criteria for inclusion in this study were membership in either of four groups. Group 1 (Pedophiles) consisted of males currently imprisoned on a sexual offence whose victim(s), either male or female, was under 16 years of age. Subjects were only included in this group if they had no criminal offence history of either victims over 16 years of age or violent offending. Offences represented in this group included sodomy, intercourse and/or sexual assault on a child under 16, incest and rape with a victim under 16.

Group 2 (Rapists) consisted of subjects who were currently serving a sentence for rape with a victim over 16 years of age. As rape is classified as a violent offence and many rapists' files reviewed indicated a history of violent offending, a history of violent offending did not exclude a

subject from meeting criteria for inclusion in this group.

Group 3 (Control 1) consisted of male inmates whose current offence and offending history did not include either a sexual or violent offence. Offences represented in this group included driving offences, theft, drug offences, burglary, and breach of Periodic Detention.

Group 4 (Control 2) consisted of adult males with no history of criminal offending.

Potential inmate subjects were drawn randomly from prison files held in the administration office of each respective institution. As subjects were indentified as meeting the criteria for the study, they were allocated to the appropriate group. Details of the subjects' offence history were obtained from the Department of Justice's data base.

Once identified, subjects were requested by Prison Staff to come to the Psychologist's office individually, and the subsequent procedure was explained to them. Their informed consent was then obtained. Inmates could refuse to participate at either of these times, or at any point there after. At one of the medium security prisons, the administration requested that brief letters of explanation be issued to the selected inmates prior to them being called to the Psychologist's office. In this particular sample, one inmate, a pedophile, declined to participate in the study. He was the only refusal in the prison sample used.

Participants for Group 4 were arranged through the Psychology Department of the Air Force Base. Advertisements were placed in the Base newspaper requesting subjects for the study. As a result, fourteen participants volunteered. The fifteenth subject, the university student, was arranged through personal contact with the author.

Once at the psychologist's office, a full description of the procedure was given, including guarantees of confidentiality. In the case of the inmate samples, particular reference was made to confidentiality in respect to prison authorities. Also with the inmate samples, subjects were informed that participation would not effect their chances for early release and would count only towards the study. At this point, all subjects were again asked if they wished to proceed and participate in the study.

The investigator in this study was a 27 year old female masters thesis student who was also employed, full time, by the Department of Justice as a psychologist.

II. MATERIALS

(1) Suggestibility

The test of Suggestibility (TS) used in this study was devised, based upon the Gudjonsson Suggestibility Scale (GSS). The TS consisted of an extended Wechsler Memory Test

style paragraph containing 38 ideas. The context of the paragraph was neutral in that it made no reference to offending or Justice related issues. The context of the narrative consisted of the story of a boy going to the shop to purchase milk for his mother. See Appendix C for the context of the TS.

The TS also included 17 questions associated with the paragraph. Twelve of these questions contained a suggestible content, seven being "leading Questions" and five presenting "false alternatives". The remaining five were "true" questions, included to obscure the purpose of the test and were not included in the measurement of suggestibility. See Appendix D for the questions.

The TS provides two measures of suggestibility. The first of these measures is Suggestibility 1 (S1), which reflects the number of questions out of twelve which the subject "yields" to. the second measure, Suggestibility 2 (S2), reflects the amount of suggested material from S1 that is incorporated into a delayed recall of the TS context.

In addition to S1 and S2, the number of ideas correctly remembered on two free recall occasions, one immediately after presentation of the paragraph (Immediate Recall Score) and after a 40-minute interval (Delayed Recall), were available.

(2) Interference Tasks

Two separate face valid scales were developed, primarily to serve as an interference task for use between the initial presentation of the suggestible context and the two free recalls.

The first of these scales, the "Attitudes About Prison Questionnaire" (AAPQ), was presented to Groups 1, 2 and 3. It consisted of 15 questions presented with Likert-type scales, ranging from 1-5 (1=strongly agree - 5=strongly disagree), with alternating scoring direction. These questions were scored to form scores on four different dimensions; admission of guilt for having committed the offence, admission of responsibility for the crime, admission of problems associated with the offence and motivation for therapy. Low scores indicated acceptance of guilt, responsibility, having problems and needing therapy. Although primarily an interference task, the AAPQ had dimensions of practical interest. See Appendix E for the scale.

The second scale, the "Memory Ability Questionnaire" (MAQ), was presented to Group 4 as an interference task. As with the AAPQ, this too was a 15 point Likert-type scale. The MAQ presented face valid questions regarding self-reported memory ability. Once completed, this questionnaire was disregarded and not included in any subsequent part of the study. See Appendix F for the scale.

- (3) Wechsler Adult Intelligence Scale-Revised (WAIS-R)
(Wechsler, 1981)

A four sub-test short form of the WAIS-R was used with all four groups to estimate the subjects' level of intellectual functioning, as well as to provide an additional interference task. The four sub-tests used were information, vocabulary, block design and picture arrangement (Silverstein, 1982).

The scaled scores were pro-rated to provide measures of verbal (VIQ), performance (PIQ) and full scale (FSIQ) IQ (Silverstein, 1982).

III. PROCEEDURE

For Groups 1, 2 and 3, the study was introduced as an investigation into both memory ability and attitudes about being in prison, particularly in relation to their offence. Group 4 were informed that it was solely a study regarding memory ability.

For all groups, the TS was presented as the first task.

Instructions were given as:

"I am going to read you a short story. Please listen carefully, because when it is over, I want you to tell me everything you remember."

Immediately upon completion of the verbal presentation of the TS context, the subjects were asked to recall the content of the story with the instructions:

"Now, please tell me everything you remember about the story."

This was scored in terms of the 38 ideas expressed in the

story and gave rise to the Immediate Recall Score.

After completion of the immediate recall task, the subjects in Groups 1, 2 and 3 were presented with the AAPQ. The scale was explained to the subjects, with emphasis placed that it was their personal beliefs and attitudes which were required, not those of the prison or Department of Justice. It was also explained that the "vagueness" of the content of the questions was designed to enable the questionnaire to be used with a wide range of offender groups. Subjects were then advised that they were welcome to make queries or ask for clarification as they proceeded with the questionnaire. Group 4 was instructed that the experimenter was interested in how they perceived their own memory ability, and that they should keep this in mind as they completed the questionnaire.

Upon completion of the questionnaire, the subjects then completed the four sub-test short form of the WAIS-R. This was presented to all the groups as consisting of memory related tasks.

After a forty-minute delay (as measured from completion of the immediate recall), the subjects were then asked the 17 questions regarding the TS context. If subjects had completed the interference tasks in less than 40-minutes, general neutral conversation was engaged in until the time interval had elapsed. If subjects had not yet completed the interference tasks within forty minutes, the task currently being completed was interrupted and resumed after the 17

questions and delayed recall had been completed.

After the 17 questions had been answered, the answers given were then reviewed verbatim by the experimenter, following the statement:

"Now I am going to review the answers you have just given me."

No feedback other than this was given, either verbal or non-verbal, i.e., eye contact. Subjects' questions regarding their performance were ignored. Performance was scored according to the number of questions containing a suggestive element which the subject yielded to.

Following this review of their answers, subjects were given the instruction:

" Now, I would like you to tell me everything you still remember about the story I read you a short while ago."

The performance for this final task was scored in two different ways; 1) number of the 38 ideas recalled, giving the Delayed Recall Score and 2) for the number of suggested ideas, from the 12 leading questions, which had been incorporated into the subjects' recollection of the TS context.

Subjects were then fully debriefed and the interest in verbal influence as well as memory, explained. Subjects were then given the opportunity to have any questions regarding the study answered. Subjects from Groups 1, 2 and 3 who requested further contact with a psychologist for personal reasons, were referred through the appropriate Department of Justice

channels.

CHAPTER III

RESULTS

I. SUBJECTS

The 60 adult males who participated in the study ranged in ages from 17 years 11 months to 62 years 6 months. The mean age was 30 years 1 month, with a standard deviation of 11 years 8 months. The 60 males serving as subjects were divided into four groups, each with 15 members.

There were significant differences in ages between the groups, $F(3,59)=6.34$ $p<.05$, with the pedophile group being significantly older than the other groups, ($M = 39.2$ years, $SD = 12.4$ years). The mean ages for the other three groups were $M = 30.1$, $SD = 13.4$ for the rapists; $M = 28.3$, $SD = 9.2$ for the prison control; and $M = 22.9$, $SD = 3.6$ for the non-prison control group.

II. INTELLIGENCE

The overall mean IQ for the groups, as assessed by a four sub-test short form of the WAIS-R was 98.1 ($SD = 18.2$; range, 68 - 138). Mean verbal IQ for the groups was 92.1 ($SD = 16.9$, range 63 - 135).

The differences between groups on FSIQ were significant, ($F(3,59)=24.2$, $p<.0001$). Posteriori tests suggested that the non-prison controls were functioning intellectually more

highly than the other three groups. Of the three prison groups, the prison control was functioning intellectually more highly than the pedophiles, but not discriminably so for the rapist group. Pedophiles had FSIQ scores of $\underline{M} = 92$, $\underline{SD} = 15$; rapists $\underline{M} = 84$, $\underline{SD} = 9$; prison controls $\underline{M} = 96$, $\underline{SD} = 10$; and non-prison controls $\underline{M} = 121$, $\underline{SD} = 15$.

Mean PIQ-VIQ for the four groups was 10.8 ($\underline{SD} = 15.9$; range - 23 - +51). Between group differences on PIQ-VIQ were barely out of the range of significance, $F(3,59)=2.68$ $p=.056$. The mean differences between PIQ and VIQ within each group were significant in accordance with Wechsler's table (Wechsler, 1981)., (pedophiles $\underline{M} = 4.5$, $\underline{SD} = 13.1$; rapists $\underline{M} = 8.1$, $\underline{SD} = 11.4$; prison control $\underline{M} = 11.3$, $\underline{SD} = 16.9$; and non-prison control $\underline{M} = 19.6$, $\underline{SD} = 18.4$). The differences were in the expected direction with PIQ exceeding VIQ (Black and Hornblow, 1973).

III. SENTENCE LENGTH

Significant differences existed regarding length of sentence between the three inmate groups, $F(2,44)=23.66$, $p<.0001$. Rapists received significantly longer sentences ($\underline{M} = 6.5$ years, $\underline{SD} = 1.3$ years), as compared to pedophiles ($\underline{M} = 3.1$ years, $\underline{SD} = 2.3$ years) and prison controls ($\underline{M} = 1.8$ years, $\underline{SD} = 2.0$ years).

IV. RECALL

(1) Immediate Recall

Significant differences existed between the groups regarding immediate recall, $F(3,59)=13.9$, $p=.0001$. Mean scores for the individual groups were as follows: pedophiles $M = 15.6$, $SD = 7.9$; rapists $M = 11.9$, $SD = 5.7$; prison controls $M = 16.6$, $SD = 4.4$; and non-prison controls $M = 25.1$, $SD=4.3$. Posteriori comparisons demonstrated that the non-prison controls were able to recall significantly more material than the other groups. Although they performed significantly better than rapists, the prison controls did not perform significantly better than pedophiles.

(2) Delayed Recall

As with immediate recall, there were significant differences between the four groups with respect to delayed recall, $F(3,59)=18.83$, $p=.0001$. The mean scores of the four groups were: pedophiles $M = 14.1$, $SD = 5.2$; rapists $M = 11.2$, $SD = 5.6$; prison controls $M = 12.8$, $SD = 6.0$; and non-prison controls $M = 24.2$, $SD = 4.0$. Posteriori comparisons showed that non-prison controls recalled significantly more information than the other groups on delayed recall.

Delayed recall, with a mean of 15.5, was poorer than immediate recall ($M = 17.3$) across all four groups, $F(1,56)=11.2$, $p<.002$. There were no significant differences across groups in this poorer performance, $F(3,56)=1.82$, $p=.15$.

Table 1. FSIQ, immediate recall and delayed recall scores for all four groups.

variable	pedophiles		rapists		prison control		non-prison control	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
full scale IQ	92	15	84	9	96	10	121	15
immediate recall	15.6	7.9	11.9	5.7	16.6	4.4	25.1	4.3
delayed recall	14.1	5.2	11.2	5.6	12.8	6.	24.2	4.0

V. TEST OF SUGGESTIBILITY

(1) Suggestibility 1

Significant between group differences existed in respect to Suggestibility 1 scores, $F(3,59)=5.02$, $p=.003$. Mean scores for the four groups were as follows: pedophiles $\bar{M} = 6.4$, $SD = 3.5$; rapists $\bar{M} = 7.6$, $SD = 3.2$; prison controls $\bar{M} = 5.3$, $SD = 3.0$; and non-prison controls $\bar{M} = 3.3$, $SD = 2.7$. Posteriori comparisons showed that non-prison controls were less suggestible than both sexual offender groups (pedophiles and rapists), but not the prison controls.

(2) Suggestibility 2

As with Suggestibility 1, there existed significant

between group scores in respect to the amount of suggested information incorporated into delayed recall of the interrogative context, $F(3,59)=5.34$, $p<.003$. Both pedophiles and rapists incorporated more suggested material into delayed recall, ($M = 1.47$, $SD = .99$; and $M = 1.3$, $SD= 1.4$, respectively), than the prison and non-prison control groups, ($M = 0.6$, $SD = 0.6$ and; $M = 0.3$, $SD = 0.6$, respectively).

Table 2. Full scale IQ scores, S1 and S2 scores for all four groups.

variable	pedophiles		rapists		prison control		non-prison control	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
FSIQ	92	15	84	9	96	10	121	15
S1	6.4	3.5	7.6	3.2	5.3	3.0	3.3	2.7
S2	1.47	.99	1.3	1.4	.6	.6	.3	.6

A significant negative correlation existed between FSIQ and S1, (Pearson correlation= $-.524$, $df(59)$, $p<.001$). A less significant negative correlation existed between FSIQ and S2, (Pearsons correlation= $-.351$, $df(59)$, $p<.05$).

VI. ATTITUDES ABOUT PRISON QUESTIONNAIRE

The only area in which significant differences between groups existed was that of admission to problems related to offending, $F(2,44)=5.42$, $p<.008$. Rapists were the least likely to admit to problems associated with their

CHAPTER IV

DISCUSSION

The age range for the inmates (Groups 1-3) used in this study is older on average as compared to previous prison studies in New Zealand, however, it shows a similar range. The higher age range in the prison sample could be a reflection of the number of pedophiles included, as they tend to have a higher mean age at time of sentencing (McLean, 1989). The mean age of the prison control group was higher than would normally be expected. This may be a reflection of sampling bias due to the exclusive use of medium security prisons, or it may be a reflection of the exclusion of violent offenders from the prison control sample. The ages of the non-prison control group were significantly lower than the prison sample. It is likely that this reflects a sampling bias due to the use of volunteers made up of Air Force personnel and a university student.

The mean FSIQ of the prison sample as measured by the WAIS-R is comparable to other prison studies done in New Zealand. The PIQ exceeding the VIQ was also as would be expected (Black and Hornblow, 1973). Hudson et al., (1989) found sexual offenders, in general, to be the lowest intellectually functioning group in their study, so it was expected that a similar profile would be evident in this research, which it

was. Hudson et al. did not discriminate regarding the age of the victim, i.e., pedophiles versus rapists, so it was interesting to note that rapists scored lowest overall in the area of intellectual functioning. The FSIQ scores of the non-prison control were significantly higher than the prison groups, as well as being higher than the general population (FSIQ 100 , SD=15, Wechsler, 1981). This was not an unexpected result as 12 of the 14 Air Force personnel used in the sample were officers. It would be expected that the average FSIQ of the officers would be significantly higher than a prison sample, who are generally less well educated. The inclusion of one university student also effected the mean level of intellectual functioning of the non-prison sample.

The significantly longer prison sentences being served by the sexual offender groups (particularly the rapists) were expected, when considering the constitution of the three prison groups.

There were significant differences between groups on immediate recall, with the non-prison control recalling much more detail than the prison samples. There were no significant group differences on immediate recall amongst the prison sample, however, there was large individual variability evident. The immediate recall scores parallel the FSIQ scores, so results were as anticipated. The same order seen with the FSIQ scores and immediate recall scores was also evident with the delayed recall scores. However,

all groups showed significantly poorer performance, as would be anticipated, with no interaction between group membership and the two recall trials.

Significant differences between groups existed on the Test of Suggestibility (S1) scores. The non-prison controls were significantly less suggestible than both sexual offender groups, but not the prison control group. With the three inmate samples, there were no significant group differences on S1. However, the magnitude was similar to that of Gudjonsson's (1984) findings.

In the case of S2, interestingly, both sexual offender groups incorporated more suggested information into their delayed recall of the short story than did the two control groups. Also interesting to note is that, although the pedophiles' FSIQ was higher than the rapists, the pedophiles in this study, as a group, were somewhat more likely (though not significantly so), to incorporate suggested information into their delayed recall than the rapists. Because the method used here was one of verbatim review rather than pressured feedback, as used with the GSS, it is difficult to compare the two scales. However, despite the significant difference between the sexual offender groups and the control groups, the absolute magnitude, as compared to Gudjonsson's (1984) results was small. This was not an unexpected result.

Although designed to serve as an interference task, the

Attitudes About Prison Questionnaire (AAPQ) yielded results of intrinsic interest. The only significant difference between the three prison groups was in the area of self-perceived problems related to offending. Originally, prior thought was that sexual offenders, particularly pedophiles, would differ from controls with respect to admission of guilt, acceptance of responsibility and motivation for treatment, as well as problems related to the offence. This line of thought was due to the general opinion that sexual offences against children were "unacceptable" crimes, which was discussed above. Therefore, it was hypothesized that pedophiles would be likely to minimize, deny or rationalize their involvement in the offence, which would have been subsequently reflected in their responses on the AAPQ.

Overall, the results obtained in this study are consistent with Gudjonsson's findings that a negative relationship exists between FSIQ and suggestibility. As was expected, both sexual offender groups demonstrated somewhat lower levels of intellectual functioning than the prison and non-prison controls groups, and were subsequently found to be more suggestible overall. Interestingly though, the prison control group and the pedophile group did not differ significantly in the area of FSIQ, yet the pedophile group scored somewhat higher on S1 and significantly higher on S2, supporting the hypothesis that sexual offenders, particularly pedophiles, would be more suggestible than non-violent, non-sexual offenders.

Though this study found significant results regarding sexual offenders demonstrating higher levels of interrogative suggestibility than both a prison control and a non-prison control, these results are preliminary and cannot be considered conclusive.

This study, as it was implemented, has several limitations. The sample size of fifteen subjects per group was small and limits the generalizability of this research. A larger sample size, aside from providing additional subjects, would have allowed for further subdivision of the groups, i.e. pedophiles could have been further classified as to age of their victim (under/over the age of twelve), sex of victim and relationship to victim (incest versus non-incest).

The composition of both the prison and non-prison groups also limited the generalizability of this study. The inmate populations were drawn exclusively from minimum and medium security prisons and therefore, cannot be considered as an accurate representation of the prison population as a whole in New Zealand. The fact that inmates used were all volunteers, and one inmate chose not to participate, again limits the generalizability of the study, as it may not accurately represent inmates who would be unlikely to volunteer.

The use of a university student and RNZAF personnel, particularly the high percentage of officers in the sample, certainly effected the overall results of the study.

Ideally, the non-prison control should have been more closely matched on age range, general intellectual functioning, socio-economic classification and contact with the Justice system. Attempts were made to obtain a non-prison control consisting of male Probation clients, who had committed non-sexual, non-violent offences and had never received a custodial sentence. However, volunteer subjects from this population were not forthcoming and an alternative non-prison control had to be arranged. For future research in this area, an option may be the use of unemployed males recruited through the Department of Labour.

Despite its limitations, this study did demonstrate significant results. However, these results are only significant and generalizable when viewed in relation to minimum to medium security inmates in New Zealand, who have been convicted of non-violent sexual offences against children, rape and some non-sexual, non-violent offences. Further research in the area is needed to make broader generalizations.

This study reveals several areas which are worthy of further investigation. In accordance with Gudjonsson and Clark's (1986) model of interrogative suggestibility, further research in the area of cognitive styles of sexual offenders is warranted. The implications for therapy with offender populations, particularly assessment (interrogative) techniques used with sexual offenders also warrants additional research.

In addition to the topic of interrogative suggestibility, which was the focus of this study, another area of future research was revealed. Although the AAPQ was designed primarily as an interference task, the propensity of rapists to view themselves as less likely to have problems associated with their offence warrants further research. The possible influence of socio-cultural variables in this perception, particularly the role of and attitudes towards women needs investigation.

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APPENDIX A

Gudjonsson Suggestibility Scale (1984)

Interrogative Context

Anna Thomson/of South/Croydon/was on holiday/in Spain/when she was held up/outside her hotel/and robbed of her handbag/which contained 50 worth/of travellers cheques/and her passport./She screamed for help/and attempted to put up a fight/by kicking one of the assailants/in the shins./A police car shortly arrived/and the woman was taken to the nearest police station/where she was interviewed by Detective/Sergeant/Delgado./The woman reported that she had been attacked by three men/one of whom she described as Oriental looking./The men were said to be slim/and in their early twenties./The police officer was touched by the woman's story/and advised her to contact the British Embassy./Six days later/the police recovered the lady's handbag/but the contents were never found./Three men were subsequently charged/two of whom were convicted/and given prison sentences./Only one/had had previous convictions/for similar offences./The lady returned to Britain/with her husband/Simon/and two friends/but remained frightened of being out on her own./

APPENDIX B

Gudjonsson Suggestibility Scale
Content of the Suggestibility Scale

1. Did the woman have a husband called Simon? (NS)
2. Did the woman have one or two children? (S)
3. Did the woman's glasses break in the struggle? (S)
4. Was the woman's name Anna Wilkinson? (S)
5. as the woman interviewed by a detective sergeant? (NS)
6. Were the assailants black or white? (S)
7. Was the woman taken to the central police station? (S)
8. Did the woman's handbag get damaged in the struggle? (S)
9. Was the woman on holiday in Spain? (NS)
10. Were the assailants convicted six weeks after their
arrest? (S)
11. Did the woman's husband support her during the police
interview? (S)
12. Did the woman hit one of the assailants with her fist or
handbag? (S)
13. Was the woman from South Croydon? (NS)
14. Did one of the assailants shout at the woman? (S)
15. Were the assailants tall or short? (S)
16. Did the woman's screams frighten the assailants? (S)
17. Was the police officer's name Delagado? (NS)
18. Did the police give the woman a lift back to her hotel?
(S)
19. Were the assailants armed with guns or knives? (S)
20. Did the woman's clothes get torn in the struggle? (S)

S = Suggestive Question

NS = Non-suggestive question

APPENDIX C

Test of Suggestibility (TS)

Context

Last Tuesday/Mary Thomson/was preparing the evening meal/ for her family/when she realized that she was almost out/of milk/and had only one half bottle left./The milkman had already been past/so she asked her son/Stephen/to run to the dairy/up the hill/and buy two bottles of milk./Mary gave Stephen some coins/out of a jar/in the kitchen/to pay for the milk./A few minutes/after he had left home Stephen returned/but with no milk./Stephen told his mother that he was 35 cents/short of money./There were no coins left in the jar/so Mary took a dollar note/out of her handbag/and sent Stephen back to the dairy./Because Stephen had to go to the shop twice/Mary told him that he could buy himself a treat/with the left over change./Stephen bought a small/bar of chocolate/and a piece of licorice/which he ate/on the way home./He still had 15 cents left over/which he decided to put in his bank/as he was saving money/for a bicycle./

APPENDIX D

Suggestibility Scale

Questions

1. Did Stephen's mother give him a one dollar note or a two dollar note? (NS)
2. Was Mary's handbag in the kitchen? (S)
3. What meal was Mary preparing? (NS)
4. Was Stephen 25 or 30 cents short of change? (S)
5. Did Mary need the milk for the sauce that she was preparing? (S)
6. Did Stephen go to the shop once or twice? (NS)
7. Was Stephen tired after having to go up the hill to the shop? (S)
8. Did Stephen buy two bottles of milk? (NS)
9. Did Mary's children normally drink a lot of milk? (S)
10. Did Stephen eat his sweets at the shop or after he got home? (S)
11. Was the dairy on the same street as the Thomsson's house? (S)
12. What treats did Stephen buy himself at the shop? (NS)
13. Did Stephen carry the money in his pocket or his hand? (S)
14. Did the owner of the shop recognize Stephen? (S)
15. Did the milkman normally come in the morning or the afternoon? (S)
16. Was Stephen saving money to replace his old bicycle? (S)
17. Was it wet or dry weather when Stephen went out to the

shop? (S)

S = Suggestive question

NS = Non-suggestive question

APPENDIX E

Attitudes About Prison Questionnaire

1. I committed the offence on which I have been convicted.

1	2	3	4	5
strongly agree				strongly disagree

2. I feel that I am responsible for the offence I have been convicted of.

1	2	3	4	5
strongly agree				strongly disagree

3. I do not feel that what I did constitutes a crime.

1	2	3	4	5
strongly agree				strongly disagree

4. I feel that I was falsely accused of committing the crime.

1	2	3	4	5
strongly agree				strongly disagree

5. I have problems associated with the offence I committed.

1	2	3	4	5
strongly agree				strongly disagree

6. I am motivated to seek therapy to help with my problems.

1	2	3	4	5
strongly agree				strongly disagree

7. I would be willing to participate in some form of therapy to help with my problems.

1	2	3	4	5
strongly agree				strongly disagree

8. I have no problems.

1	2	3	4	5
strongly agree				strongly disagree

9. I feel that therapy is a waste of time.

1	2	3	4	5
strongly agree				strongly disagree

10. I feel that the victim is to blame for the offence

1	2	3	4	5
strongly agree				strongly disagree

11. I would not seek help for any of the problems associated with my offence.

1	2	3	4	5
strongly agree				strongly disagree

12. The offence I committed was wrong.

1	2	3	4	5
strongly agree				strongly disagree

13. I did not hurt anyone by what I did.

1	2	3	4	5
strongly agree				strongly disagree

14. What I did should not be against the law.

1	2	3	4	5
strongly agree				strongly disagree

15. Therapy cannot help me as I do not have a problem.

1	2	3	4	5
strongly agree				strongly disagree.

APPENDIX F

Memory Questionnaire

1. My memory is as good as it used to be.

1 2 3 4 5
strongly agree strongly disagree

2. I am able to remember things easily.

1 2 3 4 5
strongly agree strongly disagree

3. At times, my memory ability causes me concern.

1 2 3 4 5
strongly agree strongly disagree

4. I have a good memory.

1 2 3 4 5
strongly agree strongly disagree

5. I am able to remember things to my satisfaction.

1 2 3 4 5
strongly agree strongly disagree

6. At times I forget important dates such as birthdays, anniversaries etc.

1 2 3 4 5
strongly agree strongly disagree

7. I feel that my memory could be better.

1 2 3 4 5
strongly agree strongly disagree

8. My memory is as good as it was five years ago.

1 2 3 4 5
strongly agree strongly disagree

9. I have little "tricks" to help me remember things.

1 2 3 4 5
strongly agree strongly disagree

10. I never worry about my ability to remember things.

1	2	3	4	5
strongly agree				strongly disagree

11. I sometimes have difficulty remembering names.

1	2	3	4	5
strongly agree				strongly disagree

12. I rarely forget where I have left something.

1	2	3	4	5
strongly agree				strongly disagree

13. I have a poor memory.

1	2	3	4	5
strongly agree				strongly disagree

14. Having a good memory is important to the work I do.

1	2	3	4	5
strongly agree				strongly disagree

15. I do not feel that I can rely on my memory.

1	2	3	4	5
strongly agree				strongly disagree